

SUPPORT FOR ALL CHANGES TO CLAIMS

Claims 1 and 2 have been amended to correct three errors upon which reissue application is based. The amendments **do not** enlarge the scope of the claims of the original patent (Patent No. 6,026,797).

(1) Claim 1 of the original application claims "the interior of a hollow portion of the cylinder portion" without providing antecedent basis for "interior" in the claims. In order to correct the error in language, claim 1 is amended to read "an interior of a hollow portion of the cylinder portion." Basis for an interior of a hollow portion of the cylinder portion is found, for instance, in column 7, lines 39-40, and in Figure 1, reference numeral 8 (which graphically depicts the cylinder portion, showing the sleeve shaped cylinder portion which is hollow, and therefore has an interior).

(2) Claim 1 of the original application claims "the compressed gas supplied from the valve pin chamber side opening to the gun rear end side" (column 18, lines 35-36). However, based on the disclosure and the preceding portions of the claim, the compressed gas is supplied from the gas inlet port via the valve pin chamber side opening to the gun rear end side. Therefore, the claim is amended to read "the compressed gas supplied from the gas inlet port via the valve pin chamber side opening to the gun rear end side," in order to maintain consistency with the original disclosure and the preceding claim language. See, for example, column 18, line 22 which indicates that the compressed gas is supplied from the gas inlet port. Also see column 4, line 33-34, column 8, lines 28-29, and column 11, lines 53-63; the disclosed sections indicate that gas compressed gas is supplied from the gas inlet port to the valve pin chamber, and then through the valve pin chamber side opening, and through a clearance formed between the rear end side through hole and the pressing portion, out through a side of the hit pin (on the gun rear end side).

(3) Claim 1 of the original application claims "the cylinder" (column 18, lines 33-34) without providing antecedent basis in the claims. In order to correct the error in language, claim 1 is amended to read "the cylinder portion" which language is consistent with the language used elsewhere in the claims. See, for example, column 17, line 31.

Claim 2 is amended in the same manner as claim 1, in order to correct the same three forms of error as those found in claim 1.

Application No. Not Yet Assigned
Amendment dated January 23, 2006
Reissue Application Amendment

Docket No.: YAS-0002

Based on the above amendments to the claims, applicant believes that the present reissue application is in immediate condition for allowance.

AMENDMENTS TO THE CLAIMS

Please amend claims 1 and 2 as follows:

1. (amended) An air gun comprising:

a slide arranged in an upper portion of the gun and slidable in parallel with a barrel;

a cylinder portion formed in a sleeve shape opened on a muzzle side and closed on a gun rear end side and fixed to a gun rear end side internal portion of the slide;

a hit pin projected from [the] an interior of a hollow portion of the cylinder portion to the gun rear end side and slidably arranged in a muzzle direction;

a valve body fixed to a gun body so as to be located within the hollow portion of the cylinder portion and having a hollow bullet supplying nozzle chamber on the muzzle side, a hollow valve pin chamber on the gun rear end side, and a through hole extending from the muzzle side to the gun rear end side and having a diameter smaller than diameters of the bullet supplying nozzle chamber and the valve pin chamber;

a gas inlet port opened to a sleeve-shaped circumferential face of the valve pin chamber and supplying a compressed gas to the valve pin chamber of the valve body at any time;

a bullet supplying nozzle which is formed in a sleeve shape, and is arranged within the bullet supplying nozzle chamber, and has a muzzle side end tip inserted into a muzzle side through hole of the bullet supplying nozzle chamber, and is biased on the gun rear end side at any time, and is slidable against biasing force; and

a valve pin which is formed in a sleeve shape and is arranged within the valve pin chamber, and is biased on the gun rear end side at any time, and has a muzzle side inserted into a muzzle side through hole of the valve pin chamber, and is slidable in an airtight state with respect to the muzzle side through hole of the valve pin chamber, and has a pin body arranged on the gun rear end side and having a valve pin flange portion coming in contact with a side face of the valve pin chamber on its rear end side in an airtight state, and has a nozzle inserting portion arranged on the muzzle side of the pin body and slidably inserted into a gun rear end side opening of the bullet supplying nozzle, and has a pressing portion arranged on the gun rear end side of the pin body and fixed to the pin body and inserted into a through hole of the valve pin chamber on its gun rear end side and projected onto the gun rear end side and having a gun rear end side end tip located to be adjacent to the hit pin and enabling permeation of the compressed

gas in a clearance between the pressing portion and the inserted through hole, and has a nozzle chamber side opening arranged in a hollow portion of the pin body and opened to a pin body side face on the gun rear end side of the nozzle inserting portion, and further has a valve pin chamber side opening arranged in the hollow portion of the pin body and opened to the pin body side face on the muzzle side of the pressing portion;

the air gun being constructed such that

when the hit pin is pressed on the muzzle side and is slid to the muzzle side, the valve pin is slid to the muzzle side against biasing force, and the airtight state of the valve pin flange portion and the side face of the valve pin chamber on its gun rear end side is released, and the compressed gas supplied from the gas inlet port to the valve pin chamber is supplied to the nozzle chamber side opening and the valve pin chamber side opening from a portion between the side face of the valve pin chamber on its gun rear end side and the valve pin flange portion, and the bullet supplying nozzle is slid to the muzzle side against the biasing force by a pressure of the compressed gas supplied from the nozzle chamber side opening, and a bullet is shot by supplying the compressed gas to the opening on the muzzle side from a clearance formed between an opening on a flange portion side and the nozzle inserting portion, and the cylinder portion is moved to the gun rear end side by supplying the compressed gas supplied from the gas inlet port via the valve pin chamber side opening to the gun rear end side from the clearance between the pressing portion and the through hole inserting the pressing portion therinto.

2. (amended) An air gun comprising:

a slide arranged in an upper portion of the gun and slidable in parallel with a barrel;

a cylinder portion formed in a sleeve shape opened on a muzzle side and closed on a gun rear end side and fixed to a gun rear end side internal portion of the slide;

a hit pin projected from [the] an interior of a hollow portion of the cylinder portion to the gun rear end side and slidably arranged in a muzzle direction;

a valve body fixed to a gun body so as to be located within the hollow portion of the cylinder portion and having a hollow bullet supplying nozzle chamber on the muzzle side, a hollow valve pin chamber on the gun rear end side, and a through hole extending from the muzzle side to the gun rear end side and having a diameter smaller than diameters of the bullet supplying nozzle chamber and the valve pin chamber;

a gas inlet port opened to a sleeve-shaped circumferential face of the valve pin chamber and supplying a compressed gas to the valve body at any time;

a bullet supplying nozzle which is formed in a sleeve shape, and is arranged within the bullet supplying nozzle chamber, and has a muzzle side end tip inserted into a muzzle side through hole of the bullet supplying nozzle chamber, and has a flange portion arranged on the gun rear end side and having the same diameter as the bullet supplying nozzle chamber, and has a sleeve-shaped opening arranged on the gun rear end side and having a diameter smaller than that of a gun rear end side through hole of the bullet supplying nozzle chamber, and is biased on the gun rear end side at any time, and makes the flange portion and an inner circumferential face of the bullet supplying nozzle chamber slidable against biasing force in an airtight state; and

a valve pin which is formed in a sleeve shape and is arranged within the valve pin chamber, and is biased on the gun rear end side at any time, and has a muzzle side inserted into a muzzle side through hole of the valve pin chamber, and is slidable in an airtight state with respect to the muzzle side through hole of the valve pin chamber, and has a pin body arranged on the gun rear end side and having a valve pin flange portion coming in contact with a side face of the valve pin chamber on its rear end side in an airtight state, and has a nozzle inserting portion arranged on the muzzle side of the pin body and slidably inserted into a gun rear end side opening of the bullet supplying nozzle, and has a pressing portion arranged on the gun rear end side of the pin body and fixed to the pin body and inserted into a through hole of the valve pin chamber on its gun rear end side and projected onto the gun rear end side and having a gun rear end side end tip located in a position adjacent to the hit pin and enabling permeation of the compressed gas in a clearance between the pressing portion and the inserted through hole, and has a nozzle chamber side opening arranged in a hollow portion of the pin body and opened to a pin body side face on the gun rear end side of the nozzle inserting portion, and further has a valve pin chamber side opening arranged in the hollow portion of the pin body and opened to the pin body side face on the muzzle side of the pressing portion;

the air gun being constructed such that

when the hit pin is pressed on the muzzle side and is slid to the muzzle side, the valve pin is slid to the muzzle side against biasing force, and the airtight state of the valve pin flange portion and the side face of the valve pin chamber on its gun rear end side is released, and a

nozzle chamber side of the pin body presses against the flange portion of the bullet supplying nozzle and slides the bullet supplying nozzle to the muzzle side so as to form a clearance between the flange portion of the bullet supplying nozzle and an inner surface of the bullet supplying nozzle chamber on its gun rear end side, and the compressed gas supplied from the gas inlet port to the valve pin chamber is supplied to the nozzle chamber side opening and the valve pin chamber side opening from a portion between the side face of the valve pin chamber on its gun rear end side and the valve pin flange portion and is also supplied to a clearance formed between the flange portion of the bullet supplying nozzle and the inner surface of the bullet supplying nozzle chamber on its gun rear end side via the nozzle chamber side opening, and the bullet supplying nozzle is slid to the muzzle side against the biasing force by a gas pressure, and a bullet is shot by supplying the compressed gas to the opening on the muzzle side from a clearance formed between an opening of the bullet supplying nozzle on its flange portion side and the nozzle inserting portion, and the cylinder portion is moved to the gun rear end side by supplying the compressed gas supplied from the gas inlet port via the valve pin chamber side opening to the gun rear end side from the clearance between the pressing portion and the through hole inserting the pressing portion thereinto.